C. Remarks

The claims are 1 and 3, with claim 1 being independent. Reconsideration of these claims is expressly requested.

Claims 1 and 3 stand rejected under 35 U.S.C. § 112, first paragraph, for allegedly failing to comply with the written description requirement. Specifically, the Examiner has alleged the temperature range recited in claim 1 is not supported by the application as filed and that only the end points of that range are supported. Applicants respectfully disagree.

The substitute specification, at page 18, lines 12-15, states that the urethane resin blade is immersed in a liquid of the isocyanate compound at a temperature at which the isocyanate compound is kept liquid, i.e., a range of temperatures from the melting to the boiling point. This range includes 80°C and 100°C, as well as all the temperatures in-between. Therefore, the specification clearly supports temperatures between 80°C and 100°C and not just the endpoints of the range. Accordingly, withdrawal of the written description rejection is respectfully requested.

Claims 1 and 3 stand rejected under 35 U.S.C. § 103(a) as being allegedly obvious from U.S. Patent No. 4,825,249 (Oki) in view of U.S. Patent Nos. 3,024,209 (Ferrigno); and 3,387,071 (Cahill); and JP 2001-343874 (Miura). The grounds of rejection are respectfully traversed.

The Examiner alleged that Oki teaches saturating (impregnating the chemically unsaturated surface of the blade) (see col. 2, lines 31-46). Applicants respectfully disagree.

Oki, at column 2, lines 31-46, states:

> Therefore, in accordance with the present invention, perfluoropolyether having a main structural unit $-C_xF_{2x}-O-$ (x is 1, 2, 3 or 4) and having at least at one end thereof a hydroxyl, carboxyl, isocyanate or amino group which is reactive with such unreacted compounds or derivatives is caused to **react on the surface of the urethane rubber substrate to form a coating of perfluoropolyether**. The wear resistance can be further improved by adding to such a perfluoropolyether an isocyanate compound or a hydroxyl compound which has a reactivity or affinity to the urethane rubber substrate.
>
> (Emphasis added)

That is, Oki explicitly states that a coating is formed **on** the surface, rather than in the surface. There is no mention of saturation or impregnation of any kind. In fact, Oki repeatedly refers to coating the blade surface (e.g., Abstract; col. 1, line 63; col. 3, lines 28, 40, and 49; and Examples).

Applicants have previously discussed that unlike in Oki, the cured layer in the presently claimed invention is not formed as a coating on the surface of the blade. As recited in claim 1, after the impregnation, warm air or hot air is blown on the blade surface and a solvent is used to remove the excess isocyanate compound. The substitute specification, at page 19, line 8, to page 20, line 4, elaborates:

> Next, in the step (2), the excess isocyanate compound remaining on the urethane resin blade surface (the excess isocyanate compound) is removed by blowing thereon the warm air or hot air as described previously, and optionally, by further wiping it off with a solvent capable of dissolving the isocyanate compound. If excess isocyanate compound remains on the blade surface, the isocyanate compound may react with water present in the air to form a urea resin and result in a formation of a hard urea resin layer on the urethane resin blade surface, which may negatively affect rubber elasticity. Also, the isocyanate compound, which is solid at room temperature, is heated and melted to impregnate the blade therewith. In such a case, if time has elapsed beyond a certain point before the removal, the molten isocyanate compound may solidify and become very difficult to remove.
>
> Accordingly, the step is required in which, before the isocyanate compound remaining on the urethane resin blade surface solidifies, it is sufficiently removed by blowing thereon the warm air or hot air, and optionally by further using the solvent capable of dissolving the isocyanate compound.

No such removal is taught or suggested by Oki. In fact, this removal would prevent the intended coating layer in Oki from being formed.

Miura cannot cure the deficiencies of Oki. Miura appears to refer to conditions for impregnation, while Oki, as discussed above, teaches solely coating. Thus, one skilled in the art would not look to the temperatures used in Miura to achieve impregnation in order to carry out the coating process taught in Oki.

Cahill and Ferrigno also cannot cure the deficiencies of Oki. Neither of these secondary references discloses or suggests the features missing in Oki as discussed above.

In conclusion, Applicants respectfully submit that whether considered separately or in any combination, the documents of record fail to disclose or suggest the presently claimed elements. Wherefore, withdrawal of the outstanding rejection and passage of the application to issue are respectfully requested.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

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